Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Redesignation of the 17.7-19.7 GHz Frequency	)	
Band, Blanket Licensing of Satellite	)	IB Docket No. 98-172
Earth Stations in the 17.7-20.2 GHZ and	)	RM-9005
27.5-30.0 GHz Frequency Bands, and the	)	RM-9118
Allocation of Additional Spectrum in the	)	
17.3-17.8 GHz and 24.75-25.25 GHz Frequency	)	
Bands for Broadcast Satellite-Service Use	)	

COMMENTS OF PANAMSAT CORPORATION

PanAmSat Corporation ("PanAmSat"), by its attorneys, submits these comments in response to the Notice of Proposed Rulemaking issued in the above-captioned docket on September 18, 1998 ("NPRM"). In the NPRM, the Commission solicits comments on issues relating to 1) the proposed redesignation of the 17.7-19.7 GHz band among various services, and 2) implementation of a blanket licensing procedure that will allow Ka-Band FSS satellite earth stations to operate under a single system license in bands that are designated for their primary use.

PanAmSat has participated in two informal working groups that have met regularly since Fall 1997 to discuss many of the issues that the NPRM raises. One group is comprised of both satellite and terrestrial fixed service interests that studied the FCC's proposal to redesignate the 17.7-19.7 GHz band ("Joint Working Group" or "JWG"). The JWG engaged in productive discussions but ultimately was unable to agree on a band redesignation plan prior to the comment deadline. The JWG is filing on this date, with PanAmSat's

concurrence, a report stating that the group could not reach agreement on a band redesignation plan. The JWG's discussions, however, helped PanAmSat identify problems that must be resolved in any band redesignation plan that the FCC adopts. PanAmSat will discuss issues relating to band segmentation in Section I of the comments below.

The other working group in which PanAmSat has participated is a GSO-satellite-only group that has focused on blanket licensing issues ("Blanket Licensing Group" or "BLG"). The BLG is filing a group report ("BLG Report") that addresses various issues relating to blanket licensing. PanAmSat, however, dissented in part with that report because it determined that certain recommendations that the report may contain are inappropriate and should not be adopted. PanAmSat will address blanket licensing issues in Section II of the comments below.

I. Band Redesignation Issues

A. The Commission's Proposed Plan Does Not Provide Adequate Spectrum for Use by GSO/FSS Licensees

The Commission's band redesignation plan would designate only 750 MHz (18.3-18.55 GHz and 19.7-20.2 GHz) for primary use by Geostationary Orbit/Fixed Satellite Service ("GSO/FSS"), with an additional 250 MHz (18.55-18.58) that GSO/FSS would have to share on a co-primary basis with terrestrial fixed service. PanAmSat commends the Commission for its efforts to develop a band redesignation plan that balances the needs of the various services that will operate in the 18 GHz band. The Commission's proposed plan, however, should not be adopted because it fails to provide the minimum amount of 1,000 MHz that is needed for primary use by GSO/FSS. As discussed in the Petition for

Rulemaking[1] filed by Lockheed Martin Corporation, AT&T Corp., Hughes Communications, Inc., Loral Space & Communications, Ltd., and GE American Communications, Inc. (collectively, "the Petitioners"), Ka-band GSO/FSS systems will offer new services that will result in deployment of large numbers of transceivers. GSO/FSS's need for 1,000 MHz of primary use spectrum in the 18 GHz band was established in the 28 GHz proceeding,[2] and GSO/FSS industry has subsequently relied on the Commission's commitment to provide that spectrum.

Even if the Commission were to conclude that 750 MHz of primary spectrum was adequate for GSO/FSS systems, the Commission's proposed plan does not truly achieve that amount. Of that 750 MHz, 250 MHz is located at 18.3-18.55 GHz where CARS point-to-multipoint systems are reported to be widely deployed. It would be extremely difficult for the GSO/FSS industry to use this 250 MHz for services involving ubiquitously deployed small earth stations unless the Commission requires the CARS systems to relocate. If the Commission adopts a band plan that designates only 750 MHz for primary use by GSO/FSS, it is critical for that spectrum to be only for primary use by GSO/FSS and not shared with other services. PanAmSat has extensive experience in operating GSO/FSS systems in shared frequencies around the world and can attest that it is extremely difficult to implement frequencies that require such sharing. Sharing inevitably requires severe restrictions on the

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[1] Petition for Rulemaking, RM-9005, filed Sept. 24, 1995.

[2] See In re Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, First Report and Order and Fourth Notice of Proposed Rulemaking, CC Docket No. 92-297 (rel. July 22, 1996).

type of service that can be offered. Mass-marketed consumer-type services, which are the primary objective of GSO/FSS in the Ka-band, are particularly difficult to offer in shared frequencies where any coordination is required.

The Commission's proposed plan also assumes that 250 MHz of the 1,000 MHz needed for GSO/FSS systems can be achieved by requiring GSO/FSS to share 250 MHz (18.55-18.8 GHz) with terrestrial fixed services in the 18.55-18.8 GHz band. That is simply an invalid assumption. Such shared use of the spectrum would not permit the ubiquitous deployment of small earth stations. Instead, it assumes that all GSO/FSS systems will use gateways, which only one GSO/FSS licensee apparently intends to use. The Commission should not adopt a band plan based on a system that will be used by a single GSO/FSS licensee.

The Commission proposes to require GSO/FSS to share and coordinate in the 18.55-18.8 GHz band in part because of the power flux density ("PFD") limits that currently exist at 18.6-18.8 to protect Earth Exploration-Satellite ("EES") and Space Research ("SR") services. NPRM ¶¶ 32, 34. The Joint Working Group lacked adequate information about the services for which EES and SR use the 18.6-18.8 GHz band, and therefore was unable to seriously consider alternatives that would accommodate EES and SR services. PanAmSat recommends that the Commission investigate thoroughly whether EES and SR services could be consolidated compatibly into another band where coordination will already be required under the band plan that the Commission adopts. The Commission should not eliminate 250 MHz of spectrum that is critical for GSO/FSS deployment of ubiquitous small earth stations

that result can be avoided by requiring EES and SR to relocate to another band without an undue burden.

Having participated in the Joint Working Group that tried to agree on a band plan prior to the comment deadline, PanAmSat understands that it may be difficult to develop a band plan that both designates 1,000 MHz for primary use by GSO/FSS and satisfies all other licensees. In that regard, that the FCC may wish to hold further proceedings or allow a joint industry working group additional time to negotiate a band redesignation plan. A delayed resolution of this matter would serve the public interest far better than a "compromise" plan that is unacceptable to a substantial portion of the affected licensees, including FSS/GSO licensees that will be providing many new and innovative services to a large segment of the public.

B. The Commission Should Restrict the Grandfathering Rule Proposed in the NPRM

In any band designated for FSS use on a primary basis, the Commission proposes to grandfather terrestrial fixed service operations for which an application either has been granted or is pending as of the NPRM release date. NPRM ¶ 40. PanAmSat recommends that the Commission adopt a more restrictive grandfathering rule. For the same reason that the Commission should avoid adopting rules that require co-primary sharing between GSO/FSS and terrestrial fixed services, the Commission also should avoid adopting rules that permit further deployment of terrestrial fixed service stations in bands designated for GSO/FSS primary use. Terrestrial fixed service stations are already so widely deployed in the 18 GHz band that it will be difficult for GSO/FSS operators to use significant portions of the band on a primary basis. Also, the Commission may require relocation of some of those

terrestrial fixed service systems in the rules that it adopts. The Commission would exacerbate these problems if it grandfathered terrestrial fixed systems that were not even authorized as of the NPRM release date in a band that will be designated for GSO/FSS primary use.

If the Commission grandfathers any terrestrial fixed system that was not licensed as of the NPRM release date in a band that will be designated for GSO/FSS primary use, then the grandfathered status should be secondary, regardless of when the terrestrial fixed service application was filed. If the Commission determines that it should grandfather existing terrestrial fixed systems that were licensed as of the NPRM release date, then such grandfathering should be subject to any relocation requirement that the Commission adopts.

C. The Commission Should Adopt a Non-Interference Demonstration Requirement for Any Secondary Uses

The Commission requests comment on how secondary use applicants should be required to demonstrate non-interference with primary user operations in the 17.7-20.2 GHz band. NPRM ¶ 33. An applicant for secondary use should be required to submit a detailed non-interference test plan, with actual testing required at the option of a primary user whose operation could be adversely affected by the proposed secondary use. The Commission should also ensure that any secondary operations that it allows for a particular frequency would comply with ITU regulations for that frequency.

II. Blanket Licensing Issues

A. The Commission Should Immediately Adopt A Procedure To Allow Blanket Licensing of GSO/FSS Earth Stations that Operate Within Appropriate Technical Parameters

PanAmSat supports the Commission's proposal to allow blanket licensing of small, ubiquitously deployed GSO/FSS earth stations in the 19.7-20.2 GHz, 28.35-28.6 GHz, and 29.25-30.0 GHz bands, and in any portion of the 17.17-19.7 GHz band that the Commission designates for primary GSO/FSS use. The Commission correctly recognized in the NPRM that requiring individual licensing of small, ubiquitously deployed earth stations would be unduly burdensome and would adversely affect the ability of the public to receive the benefits of these new satellite services.[3] Accordingly, blanket licensing of GSO/FSS earth stations in the bands referenced above is in the public interest.

The Commission's blanket licensing procedure, however, should incorporate appropriate technical requirements and licensing rules that will apply to GSO/FSS Ka-band blanket licensees. PanAmSat has participated in the GSO Blanket Licensing Group that has met regularly over the past year to study such requirements. That group reached agreement on some issues and PanAmSat will likely agree with many of the recommendations that will be contained in the BLG Report. PanAmSat, however, disagrees with some of the decisions that certain members of the BLG Group reached and that the BLG Report will likely contain.

PanAmSat believes that the initial uplink coordination threshold for GSO/FSS systems in the Ka-band should be lower than the figure of +25.0 dBW/MHz recommended by some members of the BLG Group. PanAmSat recommends a lower uplink coordination threshold

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[3] NPRM ¶ 43.

of +20.0 dBW/MHz at a 2° off-axis angle. The Commission's rules should permit inter-operator agreements to coordinate at higher density levels based on a waiver procedure similar to that used for VSAT operations in the Ku-band. This approach will protect operators whose Ka-band systems require the lower uplink PFD value, yet will permit coordination for operators that require a higher value.

PanAmSat also disagrees with the Blanket Licensing Group's proposal that a satellite operator's authority to exceed the blanket licensing limits pursuant to a coordination agreement with a neighboring operator would be valid only as long as operators who are parties to the agreement remain at the particular orbit location concerned. Such a requirement is simply not realistic and would impose an unreasonable risk on satellite operators. PanAmSat recommends that the Commission reject any such requirement.

PanAmSat similarly disagrees with the Blanket Licensing Group's conclusion that the FCC should require any U.S. satellite operator who wishes to serve a foreign region to comply with the U.S. Ka-band blanket licensing parameters. The Blanket Licensing Group apparently believes that the FCC's Ka-band parameters would apply to any U.S.-licensed system, regardless of whether the system provides blanket-licensed Ka-band services and even if the U.S.-licenses satellite is located in the international arc next to foreign-licensed satellites that are not subject to such constraints. This issue is very complex and very critical to U.S.-licensed satellite operators who provide services to earth stations located in foreign countries using satellites located outside the domestic arc. The issue deserves more thorough analysis than the Blanket Licensing Group has been able to give it thus far.

PanAmSat recommends that the Commission permit the Blanket Licensing Group to address the international applicability issue in further meetings before adopting any rule on that issue. In addition, Hughes Communications Galaxy, Inc. has raised a number of important concerns about the Blanket Licensing Group's recommendations that PanAmSat believes the Blanket Licensing Group should be allowed to address further before the Commission adopts blanket licensing rules.

PanAmSat does not object to Teledesic Corporation's proposal to allow blanket licensing of NGSO/FSS earth stations in any segment designated for primary use by NGSO/FSS systems. The Commission, however, should consider NGSO intra-service sharing issues and licensing criteria on a separate track. As the Commission correctly recognizes, the issues raised with regard to NGSO intra-service sharing are different than in the case of GSO/FSS. NPRM ¶ 67. The Commission therefore should not allow issues unrelated to GSO/FSS blanket licensing to delay the GSO/FSS industry's efforts to deliver new and innovative services to the public.

B. The Commission Should Not Adopt Requirements for GSO/FSS Licensees to Maintain Records and to File Annual Reports

The Commission asks whether blanket license applicants should be required to designate a point of contact where records on location and frequency use of satellite earth stations would be maintained, and to file annual reports on the number of earth stations brought into service. NPRM ¶ 45, 46. The Commission correctly observed in the NPRM that it would be difficult to monitor the location of small, mass-marketed Ka-band earth stations that will likely number in the millions. NPRM ¶ 45. In fact, it would be virtually impossible for a satellite system licensee to maintain records on the location and frequency of

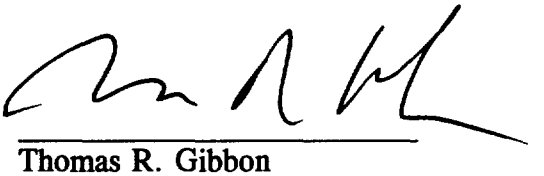
such earth stations. Licensees may not know 1) who purchases these of earth stations, 2) how many are purchased, 3) where the earth stations will be installed, or 4) whether the purchased earth stations are actually brought into service. Any requirement for licensees to maintain records or to file annual reports containing such information would largely undermine the purpose of adopting a Ka-band blanket licensing procedure and should not be adopted.

CONCLUSION

PanAmSat recommends that the Commission adopt rules consistent with the above comments and to allow parties to address further certain issues as discussed above.

Respectfully submitted,

PANAMSAT CORPORATION



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